

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>BE T04L0037</b>	<b>FOR FURTHER ACTION</b>	See Form PCT/IPEA/416
International application No. <b>PCT/FR2004/000779</b>	International filing date (day/month/year) <b>26.03.2004</b>	Priority date (day/month/year) <b>27.03.2003</b>
International Patent Classification (IPC) or national classification and IPC <b>F16K31/08</b>		
Applicant <b>SAMES TECHNOLOGIES</b>		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>6</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																									
<p>4. This report contains indications relating to the following items:</p> <table><tr><td><input checked="" type="checkbox"/></td><td>Box No. I</td><td>Basis of the report</td></tr><tr><td><input type="checkbox"/></td><td>Box No. II</td><td>Priority</td></tr><tr><td><input type="checkbox"/></td><td>Box No. III</td><td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td></tr><tr><td><input type="checkbox"/></td><td>Box No. IV</td><td>Lack of unity of invention</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Box No. V</td><td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VI</td><td>Certain documents cited</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VII</td><td>Certain defects in the international application</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VIII</td><td>Certain observations on the international application</td></tr></table>		<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of submission of the demand	Date of completion of this report																								
Name and mailing address of the IPEA/EP	Authorized officer																								
Facsimile No.	Telephone No.																								

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/FR2004/000779

Box No. I

Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-15 \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. 1-17 \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the drawings:
- sheets 1/8-8/8 \_\_\_\_\_ as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	1-17	YES
	Claims		NO
Inventive step (IS)	Claims	2-8	YES
	Claims	1, 9-17	NO
Industrial applicability (IA)	Claims	1-17	YES
	Claims		NO

## 2. Citations and explanations (Rule 70.7)

1. In the present report, reference is made to the following documents:

D1: EP 0 997 676 A (NORDSON CORP) 3 May 2000  
(2000-05-03) (cited in the application);

D2: US 6 092 545 A (BEDORE DANIEL BLAINE ET AL)  
25 July 2000 (2000-07-25).

2. INDEPENDENT CLAIM 1

- 2.1 The present application does not fulfil the requirements set forth in PCT Article 33(1) because the subject matter of claim 1 does not involve an inventive step as defined in PCT Article 33(3).

- 2.1.1 Document D1, which is considered to be the prior art closest to the subject matter of claim 1, describes (the references between parentheses apply to said document):

a valve (10) that includes a body (12) having a

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Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

needle (16) mobile therein, wherein said needle (16) is sealingly engageable with a seat (18) rigidly connected to said body (12) and is magnetically coupled, via a sealed, non-magnetic partition (34), to a drive member (58) provided with a plurality of magnets (72) that have magnetic bodies (70) inserted therebetween.

2.1.2 It follows that the subject matter of claim 1 differs from the teaching in D1 in that:

- said needle does not have any magnets.

2.1.3 The problem that the present invention is intended to solve can therefore be considered to arise from the fact that:

- with permanent magnets, the manufacturing and positioning tolerances are such that the air gap between the needle and the corresponding drive member must be relatively large in order to avert frictional forces, which prevent proper valve operation.

2.1.4 The solution proposed in claim 1 of the present application is not considered to be inventive (PCT Article 33(3)), for the following reasons:

The features in said claim (a needle without any magnets) have already been used for the same purpose in a similar valve (a magnetically biased

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
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non-return valve) (see D2, column 2, lines 60-65).

It would be obvious for a person skilled in the art to use these features with a corresponding effect in a valve as per document D1 and thereby arrive at a valve as per claim 1.

2.1.5 As a result, a person skilled in the art seeking to solve the stated problem would combine the features described in documents D1 and D2 without having to exercise any inventive skill. The solution proposed in independent claim 1 cannot, therefore, be considered to involve an inventive step (PCT Article 33(3)).

2.1.6 What is more, the above feature (a needle without any magnets) is merely one of a plurality of obvious options that a person skilled in the art might select in order to solve the stated problem (of avoiding the mounting of permanent magnets on the needle by using a needle made of a magnetic material), depending on each particular case, and without an inventive step being involved.

### 3. DEPENDENT CLAIMS 9-17

These claims do not contain any features which, in combination with the features of any one of the claims to which they refer, might fulfil the PCT requirements of novelty and inventive step (PCT Article 33(2) and 33(3)).

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Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
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## 3.1 DEPENDENT CLAIMS 2-8

The combination of features in claims 2-8 is not found in the prior art and cannot be derived in an obvious manner therefrom, for the following reasons:

None of the documents cited in the search report or mentioned in the description discloses these features (a needle provided with magnetic ribs) and it would not be obvious for a person skilled in the art to use these features in a valve as per document D1.